

# BATTERIES FOR ADVANCED TRANSPORTATION TECHNOLOGIES

## PROGRAM: ANNUAL REVIEW AGENDA

Lawrence Berkeley National Laboratory, Building 66 Auditorium  
DAY ONE: Wednesday, May 28, 2003

TIME	SPEAKER (Affiliation)	PRESENTATION TITLE
8:00	-	Coffee and Light Breakfast
8:30	Don Grether (LBNL)	Welcome, Opening Remarks
8:40	Frank McLarnon (LBNL)	BATT Program Overview, Baseline Systems
8:55	Vince Battaglia (ANL/DOE)	Meeting Objectives, Instructions to Reviewers
<b>Cell Development</b>		
9:05	Kathryn Striebel (LBNL)	Development of the Natural Graphite/LiFePO <sub>4</sub> Cell
9:45		Break
10:05	Tom Richardson (LBNL)	Cell Development Support, Overcharge Protection, Cathode Materials
10:45	Karim Zaghib (IREQ)	Li-Ion Polymer Batteries with Low-Cost Materials
<b>Modeling</b>		
11:20	John Newman (LBNL/UCB)	Improved Electrochemical Models
12:00	-	Lunch (delivered)
12:45	Ann Marie Sastry (University of Michigan)	Modeling of Electrode Failure Modes
<b>Diagnostics</b>		
1:20	Robert Kostecki (LBNL)	Spectroscopic and Microscopic Characterization of Electrode Surfaces
2:00	Jim McBreen (BNL)	Battery Materials: Structure and Characterization
2:35	Philip Ross (LBNL)	High-Power Li-Ion Batteries
3:10	-	Break
3:30	Elton Cairns (LBNL./UCB)	Cathode Material Studies Using NMR
4:05	Clare Grey (SUNY Stony Brook) and Gerd Ceder (MIT)	First-Principles Calculations and NMR Spectroscopy of Cathode Materials with Multiple Electron Transfers per Transition Metal
4:45	Tom Devine (LBNL/UCB)	Corrosion of Aluminum Current Collectors in Lithium-Ion Batteries
5:20	-	Adjourn

## DAY TWO: Thursday, May 29, 2003

TIME	SPEAKER	PRESENTATION TITLE
8:00	-	Coffee and Light Breakfast
<b>Anodes and Cathodes</b>		
8:30	Mike Thackeray (ANL)	Non-Carbonaceous Anodes and Novel Cathodes
9:15	Stan Whittingham (SUNY Binghamton)	Novel Anode and Cathode Materials
10:00	-	Break
10:20	Abbas Nazri (U. of Michigan)	Composite Anodes
11:00	Marca Doeff (LBNL)	Cathode Materials for the BATT Program
11:40	Steen Schougaard (U. of Texas)	Development of Advanced Cathodes: $\text{LiMn}_x\text{Ni}_{1-x}\text{O}_2$ Revisited
12:10	-	Lunch (delivered)
<b>Electrolytes</b>		
12:55	Nitash Balsara (LBNL/UCB)	Physical Characterization of Polymer Electrolytes
1:30	John Kerr (LBNL)	Polymer Electrolyte Research
2:05	Peter Fedkiw (North Carolina State University)	Composite Polymer Electrolytes for Lithium and Lithium-Ion Batteries
2:40	-	Break
3:00	Darryl DesMarteau and Steve Creager (Clemson University)	Battery Electrolytes Based on Oligomeric Lithium bis((perfluoroalkyl)sulfonyl)imide Salts
3:35	Oleg Borodin (University of Utah)	Molecular Modeling of Solid Polymer Electrolytes, Single-Ion Conductors and Gel Electrolytes
4:10	All	Discussion
4:30	-	Adjourn
4:40	Reviewers and DOE	Executive Review Session